

REMARKS

Claims 1-22 were rejected and remain pending in the instant application.

Claims 1, 12, 14, 17 and 19 are currently amended as set forth above. The amendments are fully supported by the original disclosure, and no new matter is believed to be added. For at least the reasons set forth below, the amended claims are believed to be allowable. Thus, entry of the offered amendments and allowance of the pending claims is respectfully requested.

Claim Rejections Under 35 U.S.C. § 103

1. Claims 1-6, 9-13 and 19-22 were rejected under 35 USC 103(a) as allegedly being unpatentable over US Publication No. 2003/0048260, issued to Matusis (herein after "Matusis").
2. Claims 7, 8 and 14-16 were rejected under 35 USC 103(a) as allegedly being unpatentable over Matusis in view of US Patent No. 6,888,532, issued to Wong.
3. Claims 17-18 were rejected under 35 USC 103(a) as allegedly being unpatentable over Matusis in view of US Patent No. 6,538,636, issued to Harrison.

Applicants respectfully maintain, for at least the reasons previously discussed, that Matusis, Wong, and Harrison fail to teach or suggest the recitations of the claims (see e.g., Response filed June 1, 2010). Nonetheless, independent claims 1, 12, 14, 17 and 19 are amended in order to advance prosecution.

As amended, claim 1 recites an apparatus comprising, in pertinent part, "a detection mechanism configured to

detect one or more movements of at least a portion of at least one of the user's two hands toward the key,

in response to detecting the one or more movements, determine, prior to an activation of the key by physical contact with one of the terminating hand members, which one of the user's two hands will be used to activate the key, and

in response to the determining, assign one of the first function or the second function to the activation of the key prior to said activation.

Thus, as amended, claim 1 requires that a detection mechanism that is configured to detect hand movements, to determine which of the user's hands will be used to activate the key, and to assign a function to the key in response to that determination. Claim 1 also requires each of these actions to be performed *before* the key is activated by physical contact with one of the terminating hand members.

First, Matusis does not teach or suggest "in response to detecting the one or more movements" [of at least a portion of at least one of the user's two hands toward the key] "determine, *prior to an activation of the key* by physical contact with one of the terminating members, which one of the user's two hands *will be used* to activate the key"

Paragraphs [0045] and [0068] were cited for teaching the detection of movements toward the key. Paragraphs [0044]-[0045] merely disclose that the number of possible functions associated with a user's finger may be increased by having an input sensor that is also capable of detecting a motion performed by the user "*at the same time when the user activated the input sensor*" (paragraph [0044], emphasis ours). And this motion is not a motion "toward the key," it is a motion *on* the key (see e.g., Fig. 4, Fig. 10). Paragraph [0068] merely discloses that the processing means 1130 may also include software algorithms to distinguish the moving parts of a hand from the static background, such as by identifying vertical motion of the selected fingertip toward the input sensor. Matusis neither teaches nor suggests determining which hand will be used to activate the input sensor based on detected motion. On the contrary, Matusis discloses in previous passages that processing means 1130 identifies the finger (and therefore the function) *after* the finger has touched the input sensor 1110 (see e.g., paragraph [0064] and paragraphs [0057]-[0063]). Therefore, Matusis does not teach or suggest the above recitation of claim 1.

Next, Matusis does not teach or suggest "in response to the determining, assign one of the first function or the second function to the activation of the key prior to said activation." Again, Matusis merely discloses assigning a function to a key *during or after* the activation of the key by contact with the user's finger. The user touches the input sensor to activate it (paragraph [0042]), and imaging is used to identify "which finger touched and activated the input sensor" (paragraph [0043]). The image is taken *at the time of activation* because the imaging is triggered by the activation (paragraph [0055]; see also paragraph [0052], imaging means images a part of the user's hand large enough to identify the selected fingertip

“touching and activating” the input sensor). Alternatively, the imaging means may acquire a continuous stream of image frames, but the time of activation/contact must be obtained from input sensor 1110 along with the image frames “in order to synchronize the images with the time of activation or time of contact” (paragraph [0055]). Processing means 1130 then processes the inputs from input sensor 1110 (including timing of input sensor activation) and imaging means 1120 in order to identify the selected function (paragraphs [0056]-[0063]). In the system of Matusis, a function **cannot** be assigned to the key prior to activation, because in either case the identification of the finger (and the function associated with the finger) is responsive to the activation of the input key.

For at least the above reasons, Matusis neither teaches nor suggests the features of amended claim 1. Therefore, claim 1 is allowable over Matusis.

Claims 12, 14, 17 and 19 have been amended to recite features substantially similar to those of amended claim 1. Therefore, for at least the same reasons, claims 12 and 19 are also allowable over Matusis.

Claims 2-6 and 9-11, claim 13, and claims 20-22 depend from claims 1, 12, and 19, respectively, incorporating the recitations of their base claims. Therefore, claims 2-6, 9-11, 13, and 20-22 are allowable over Matusis by virtue of their dependence from allowable base claims and for their additional recitations, which are not taught or suggested by Matusis.

With regard to claim 14, Wong fails to remedy the deficiencies of Matusis. Wong merely discloses an electronic device with pressure sensors to detect the orientation of the device. The orientation of the user interface is selected based on the detected orientation of the device (col. 2, lines 39-49). Therefore, for at least the above reasons, claim 14 is allowable over Matusis and Wong.

Claims 7-8 and claims 14-16 depend from claims 1 and 12, respectively, incorporating the recitations of their base claims. Therefore, claims 7-8 and 14-16 are allowable over Matusis and Wong by virtue of their dependence from allowable base claim and for their additional recitations, which are not taught or suggested by Matusis and Wong.

With regard to claim 17, Harrison fails to remedy the deficiencies of Matusis. Harrison merely discloses an electronic device with a motion sensor to detect the orientation of the device. The locations of the control mechanisms are adjusted based on the detected

orientation lines (col. 3, lines 11-35; Figs. 2 and 3). Therefore, for at least the above reasons, claim 17 is allowable over Matusis and Harrison.

Claim 18 depends from claim 17, incorporating its recitations. Therefore, claim 18 is allowable over Matusis and Harrison by virtue of its dependence from an allowable base claim and its additional recitations, which are not taught or suggested by these references.

CONCLUSION

In view of the foregoing amendments and remarks, Applicants believe the applicable rejections have been overcome and all claims remaining in the application are presently in condition for allowance. Accordingly, favorable consideration and a Notice of Allowance are earnestly solicited. The Examiner is invited to telephone the undersigned representative at (206) 622-1711 if the Examiner believes that an interview might be useful for any reason.

It is not believed that extensions of time are required beyond those that may otherwise be provided for in documents accompanying this paper. However, if additional extensions of time are necessary to prevent abandonment of this application, then such extensions of time are hereby petitioned under 37 C.F.R. § 1.136(a).

If the Examiner has any questions concerning the present paper, the Examiner is kindly requested to contact the undersigned at (206) 407-1569. If any fees are due in connection with filing this paper, the Commissioner is authorized to charge the Deposit Account of Schwabe, Williamson and Wyatt, P.C., No. 50-0393.

Respectfully submitted,

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